

### Summary of Technical/Policy issue for Discussion with Ecology 3-18-03

1. Ran Existing conditions – all dams in and point sources in.
  - Calculated 30-year mean temperature for each day of the year.
2. Ran model 15 times, removing a different dam each time.
  - Calculated 30-year mean temperature for each day of the year.
3. Subtracted mean with a dam removed from existing mean for each day of the year.
  - Effect of Dam A = existing mean – mean with Dam A removed.
4. Selected the maximum effect from 3 above for the following dams:
 

<u>Dam</u>	<u>Maximum</u>
WEL	0.12 °C
RRH	0.13 °C
RIS	0.05 °C
PRD	0.28 °C
TDA	0.15 °C

  - Allocated these effects to these dams each day of the year.
  - Results showed that WQS would be exceeded below McNary.
  - Could only allocate this maximum effect to 2 dams at most.
5. Selected the entire 365 days of mean effects from 3 above.
  - So for 30 years we allocated the mean effect for each day of the year.
  - If July 1 had a mean effect of 0.13, then 30 July 1's were allocated 0.13.
6. All of these runs from 4 and 5 above were done with 0.0 and 0.12 allocated to other dams, 20 MW added at each target site, all the point sources in place and the 2 pulp mills increase as requested by Ecology.
7. Results from 5 above:

<b>Description</b>	<b>McN</b>	<b>TDA</b>	<b>RM 42</b>	<b>RM 4</b>
All 5 dams treated as in 5	9 days over max = 0.18	23 days over max = 0.21	42 days over max = 0.19	23 days over max = 0.17
All but PRD treated as in 5. PRD => 0 & .12	0 days over max = 0.08	2 days over max = 0.15	12 days over max = 0.18	7 days over max = 0.17
All but PRD & TDA treated as in 5.	0 days over max = 0.08	0 days over max = 0.06	0 days over max = 0.1	0 days over max = 0.09